February 18, 2004

MODIS sensor Working Group (MsWG) Summary

Attendance: John Barker, Bob Barnes, Stuart Biggar, Vincent Chiang, Catherine Corlan, Gene Eplee, Gerhard Meister, Chris Moeller, Vince Salomonson, Junqiang Sun, Gary Toller, Jack Xiong, Zhengming Wan, Joe Esposito

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Scheduled Items

Item 1 Instrument Status

JX) Terra:

The direct broadcast problem resolved. This problem was a Terra-TDRSS contact issue and not a MODIS problem.

An SFE anomaly occurred while passing through the SAA that stopped data transmission today, 2004049T14:31Z. It is thought that the anomaly was caused by a single event upset. Flight operations meeting is scheduled at 14:30 today (during this MsWG meeting) to discuss the anomaly and restarting of data transmission. This is a Terra satellite issue that caused a MODIS data loss { SFE-A was successfully turned back on and the Science Record enabled at 2004050T16:11Z}

Current Status – both Aqua and Terra MODIS are running nominally.

Item 2 Recent Activities and Efforts

JX) RSB review last week 2/11-12/2004. Draft of panel report expected after the Hawaii meeting (a couple of weeks).

A strategy meeting about m1 delivery was held with the Oceans calibration team (GSFC). Delivery of RSB LUTs (primarily m_1) will remain "as is". Other considerations and discussions are on-going.

JX) Presented charts on the effect of the RVS on L1B TEB EV retrievals. In summary, the DSM RVS causes improvements thereby improving the science. See charts attach to the meeting agenda email sent by Jack Xiong

Around the Table

Participant: Chris Moeller (going over a report sent to Vince) – Wisconsin uses the difference and RMS to quantify "better science". The data being used had an ER2 under flight of the MODIS swath at the start-of scan side of the image. There is a small change in Cirrus cloud top pressure retrieval (MODIS cloud top data fall off in a reasonable range whereas Lidar gives only cloud tops). MODIS can see into the cirrus clouds as an integration of cloud layers but cannot see the cloud thickness. Penetration into the

cloud, measured from the cloud bottom, is to 0.5 to 0.33 (from cloud top this is 0.5 to 2/3 into the cloud).

VS) Why does better RVS reduce the RMS?

CM) Getting better PC band ratios causes more stability in the algorithm implying better match of band retrieval to transfer due to improved RVS. We will look at more data and try to find an over flight at the end-of-scan.

JX) We can update the new TEB RVS from DSM in the next LUT delivery, or wait until next re-process. Miami SST and Santa Barbara Dr. Wan see very small impact on their products.

VS) The new RVS improves the science product and makes it better.

JX) We will prepare that in next update in about 2-3 weeks.

CM) We are ready for this to occur in 2-3 weeks.

Participant: Vince Salomonson – Hoping for next STM to occur at the end of March.

Next MsWG meeting: March 3, 2004